AMENDMENTS TO THE SPECIFICATION

Please delete the current <u>Abstract</u> in its entirety and replace with the following:

A packetized streaming media delivery network carries many "streams" of differing media content. They often are from multiple sources and of different media types. The invention consists of a scalable hardware and/or software computing element resolving the network traffic into its individual streams for focused, simultaneous, and continuous real-time monitoring and analysis. The monitoring and analysis consists of delay factor and media loss rate which measure the cumulative jitter of the streaming media within the delivery network and the condition of the media payload. These measurements form a powerful picture of network problem awareness and resolution. The delay factor objectively indicates the contribution of the network devices in the streams' path, allowing for both problem prediction and indication. In one example, tapping a packetized network at various locations allows for correlation of the same-stream performance at various network points to pinpoint the source(s) of the impairment(s).

Please amend paragraph 26 of the application-as-filed as follows:

Figure 2 illustrates one embodiment of the present invention's computing element ~~200~~ <u>105</u> which analyzes network traffic **202**. Computing element ~~200~~ <u>105</u> comprises at least one network interface **204** to receive network traffic, one or more filters **206** to filter the received network traffic, at least one computing engine **208** to compute network statistics associated with the filtered network traffic via one or more finite state machines **210**, and at least one network interface **212** to accept control instructions and transmit the computed statistics to a data consumer. Network interface **204** interfaces with the network link to be monitored via network

connections **203**. Network link protocols that support such packet-based transmission include, but are not limited to, 802.3 (Ethernet), 802.4, 802.5, USB, ATM, SONET, 802.11, Fibre-channel, Firewire or 1394, Infiniband, Bluetooth, 802.11, 802.15, 802.16, 802.17, ZigBee, or a native streaming video interface such as DVB-ASI.

Please amend paragraph 29 of the application-as-filed as follows:

Figure 3 illustrates an extended embodiment of the present invention wherein a controller **302** is used for controlling the computing element ~~200~~105. Controller **302** transmits, via an interface, control instructions from a management system to modify system-level state-based logic data associated with the computing element ~~200~~105, and receives, via the interface, the analysis results generated by the computing element ~~200~~105.

33-34

Please insert the follows paragraph between paragraphs 33 and 34:

It should be noted that computing the Instantaneous Flow Rate Balance (IFRB), and thus DF, requires knowledge of the expected media drain rate either by prior knowledge or by measurement. The expected drain rate, and thus stream bitrate, may also be referred to as the media consumption rate, as this is the rate at which the receiver of the media stream must consume that stream. It is possible that the local estimation of the drain rate may drift or be offset with respect to the actual media streams' bitrate due to frequency drift or offset between the source of the media streams' clock and our local processing clock. This drift or offset causes monotonically increasing or decreasing IFRB and virtual buffer calculations, and may be mitigated by periodically clearing the current state of the IFRB and virtual buffer. Another approach utilizes a well known method entailing Phase Locked Loops (PLL) or Delay Locked

Loops (DLL) to remove the drift or offset.